

Sustainability Defined

The term “sustainable” pertains both to “natural resource utilization behavior” and to “a societal condition”. Sustainable natural resource utilization behavior and sustainable human societies exist in perpetuity—indefinitely—in the absence of an aborting act of Nature.

Sustainable Natural Resource Utilization Behavior

Sustainable natural resource utilization behavior involves the utilization of renewable natural resources—water, cropland, pastureland, forests, and wildlife—exclusively. Renewable natural resource reserves can be depleted only at levels less than or equal to the levels at which they are replenished by Nature.

The utilization of nonrenewable natural resources—fossil fuels, metals, and minerals—at any level, is not sustainable.¹

Aquatic, terrestrial, and atmospheric natural habitats can be degraded only at levels less than or equal to the levels at which they are regenerated by Nature.

All other natural resource utilization behavior and all other natural habitat degradation are unsustainable—period.

Sustainable Human Societies

A sustainable human society utilizes renewable natural resources exclusively, at levels less than or equal to the levels at which they are replenished by Nature. Nonrenewable natural resources are not used at any level.¹

A sustainable human society degrades natural habitats at levels less than or equal to the levels at which they are regenerated by Nature.

A human society that engages in other natural resource utilization behavior and/or other natural habitat degradation is unsustainable—period.

Self-deception and Nonrenewable Natural Resources

Self-deception typically results within industrialized societies such as America, who have incorporated nonrenewable natural resources into our natural resource mix. We go to great lengths to convince ourselves that our natural resource utilization behavior and our society can still be sustainable, despite our ever-increasing utilization of nonrenewable natural resources.

Nonrenewable natural resources present a tremendous temptation in this regard because they have enabled us to dramatically increase our economic activity level and our resulting population level and material living standards. Were we somehow able to utilize nonrenewable natural resources at “acceptable levels” and still be “sustainable”, we could maintain many of the amenities associated with our industrialized lifestyles, to which we have become addicted, and feel cozily comfortable that future generations could do the same.

Unfortunately, we cannot—any and all persistent use of nonrenewable natural resources is unsustainable. An “acceptable level” of persistent nonrenewable natural resource utilization is an oxymoron. Attempting to rationalize our ongoing use of nonrenewable natural resources at any level is simply self-serving hypocrisy. Our unspoken, but real, perspective is that we hope that available supplies of critical nonrenewable natural resources remain sufficient to support “us” at our current material living standards—“they”, future generations, are on their own.

Most Americans prefer not to consider the concept of “sustainability”, because the realities associated with our inevitable transition to a sustainable lifestyle paradigm are very unpleasant. Unfortunately, Nature could care less about our preferences. Sustainability is not an option; we will be sustainable—soon.

Our choice involves the process by which we will become sustainable. We can transition to a sustainable lifestyle paradigm voluntarily, thereby mitigating to some extent the devastating population level and living standard reductions that will inevitably result. Or, we can refrain from taking meaningful mitigating action and allow Nature to orchestrate our transition to sustainability through societal collapse, thereby causing us to experience catastrophic reductions in our population level and living standards.

Footnote

(1) The possible exception from a practical standpoint is the intermittent and incidental use of nonrenewable natural resources by hunter-gatherer societies. The key consideration regarding nonrenewable natural resource utilization is that a society cannot become dependent upon the persistent utilization of nonrenewable natural resources to maintain its population level and material living standards—as all industrialized societies have.

Author Bio (Chris Clugston): For the past three years I have conducted extensive independent research into the area of sustainability, the goals of which are to quantify from a combined ecological and economic perspective the extent to which our American society is currently overextended—living unsustainably beyond our means—and to understand the causes, implications, and possible solutions associated with our predicament.

Prior to that I spent thirty years working with information technology sector companies in marketing, sales, finance, M&A, and general management—the last twenty as a corporate chief executive and management consultant. I received an AB/Political Science, Magna Cum Laude and Phi Beta Kappa from Penn State University, and an MBA/Finance with High Distinction from Temple University in Philadelphia, PA. I can be reached at coclugston “at” comcast “dot” net.